Fig. 1

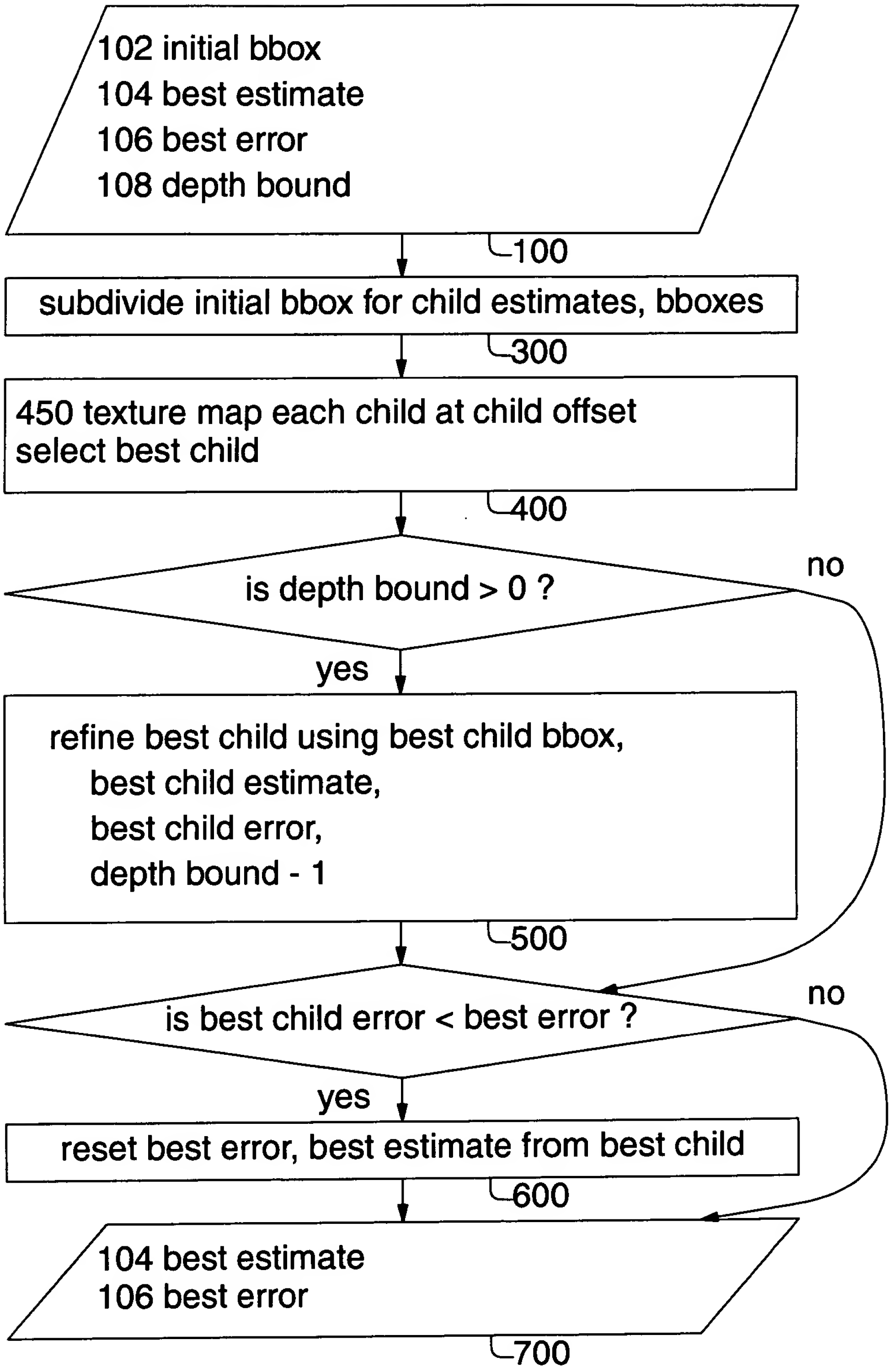

102 initial bbox
104 best estimate
106 best error
108 depth bound
100
subdivide initial bbox for child estimates, bboxes
300
450 texture map each child at child offset
select best child
400
is depth bound > 0 ?
no
yes
refine best child using best child bbox,
best child estimate,
best child error,
depth bound - 1
500
is best child error < best error ?
no
yes
reset best error, best estimate from best child
600
104 best estimate
106 best error
700

Fig. 2

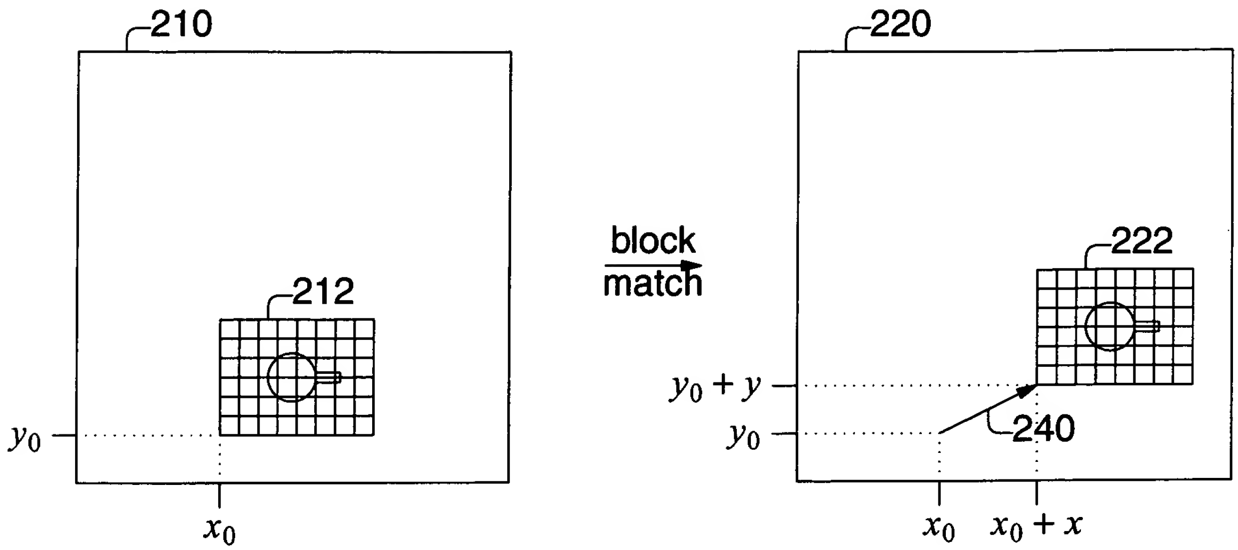

210
212
$y_0$
$x_0$
block match
220
222
$y_0 + y$
$y_0$
240
$x_0$
$x_0 + x$

Fig. 3

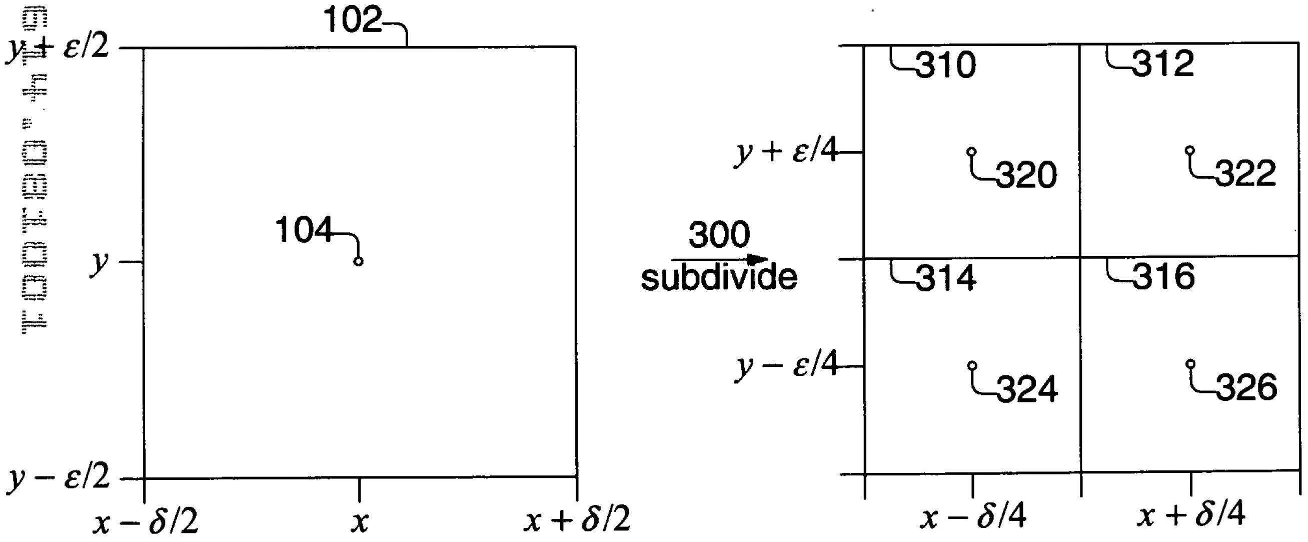

102
$y + \varepsilon/2$
104
$y$
$y - \varepsilon/2$
$x - \delta/2$
$x$
$x + \delta/2$
300
subdivide
310
312
$y + \varepsilon/4$
320
322
314
316
$y - \varepsilon/4$
324
326
$x - \delta/4$
$x + \delta/4$

Fig. 4

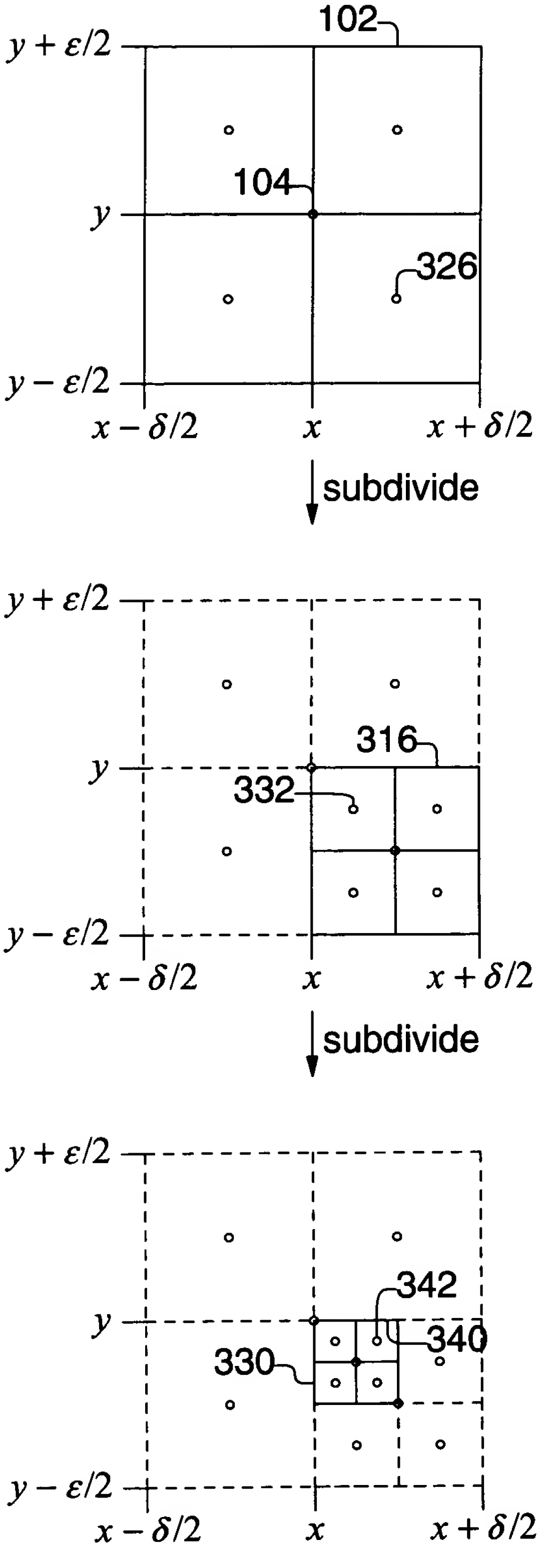
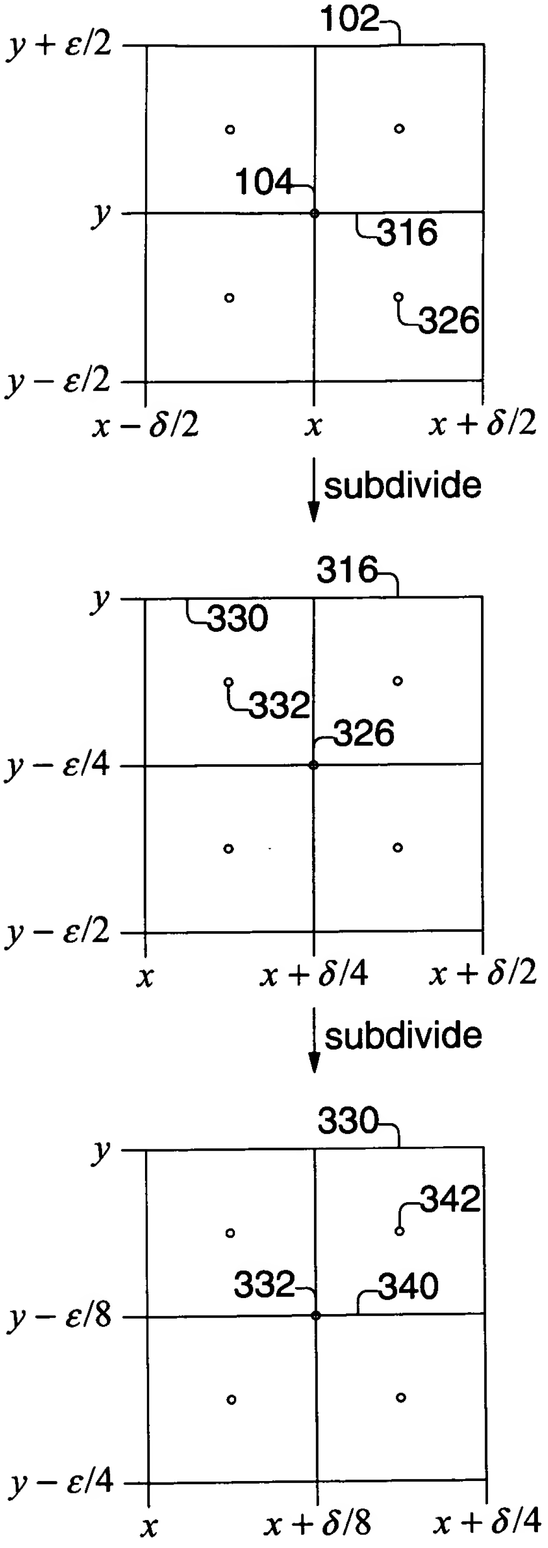

102
104
326
$y+\varepsilon/2$
$y$
$y-\varepsilon/2$
$x-\delta/2$
$x$
$x+\delta/2$
subdivide
316
332
subdivide
342
340
330

Fig. 5


102
104
316
326
$y+\varepsilon/2$
$y$
$y-\varepsilon/2$
$x-\delta/2$
$x$
$x+\delta/2$
subdivide
316
330
332
326
$y-\varepsilon/4$
$x+\delta/4$
subdivide
330
342
332
340
$y-\varepsilon/8$
$x+\delta/8$

## Fig. 6

### 500 Refinement

```
refine(initial_bbox, best_estimate, best_error, depth_bound) {
 subdivide initial_bbox to 4 child_bboxes
 best_child_error = ∞
 foreach child_bbox {
   child_estimate = child_bbox.center
   texture map from target to source using child_estimate
   compute pixelwise child_error in source
   if (child_error < best_child_error) {
     best_child_error = child_error
     best_child_estimate = child_estimate
   }
 }
 if (depth_bound > 0) {
   refine(child_bbox, best_child_estimate, best_child_error, depth_bound - 1)
 }
 if (best_child_error < best_error) {
   best_error = best_child_error
   best_estimate = best_child_estimate
 }
}
```

# Fig. 7

## 450 Texture Map

```
450-001     texture_map(dx, dy, x0, y0, xf, yf) {
450-002       glBegin(GL_QUADS);
450-003       glTexCoord2f(x0 + dx, y0 + dy); glVertex2f(x0, y0);
450-004       glTexCoord2f(xf + dx, y0 + dy); glVertex2f(xf, y0);
450-005       glTexCoord2f(xf + dx, yf + dy); glVertex2f(xf, yf);
450-006       glTexCoord2f(x0 + dx, yf + dy); glVertex2f(x0, yf);
450-007       glEnd();
450-008     }
```